

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 6,514,640 B1  
APPLICATION NO. : 08/998264  
DATED : February 4, 2003  
INVENTOR(S) : Armand et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 1, line 24

After “for use as”, insert --an--.

Column 2, line 44

Before “and an electrolyte”, insert --cathode-- and delete “catrode”.

Column 2, line 51

After “better lithium ion”, insert --diffusivity-- and delete “diffusitivity”.

Column 2, line 57

Before “tetrahedra can”, insert --PO<sub>4</sub><sup>3-</sup>-- and delete “PO<sub>4</sub><sup>3-</sup>”.

Column 2, line 58

Before “tetrahedra.”, insert --VO<sub>4</sub><sup>3-</sup>-- and delete “VO<sub>4</sub><sup>3-</sup>”.

Column 3, line 23

After “on the initial”, insert --P<sup>5+</sup>-- and delete “p<sup>5+</sup>”.

Column 3, line 24

Before “tetrahedra”, insert --SiO<sub>4</sub><sup>4-</sup>-- and delete “SiO<sub>4</sub><sup>2-</sup>”.

Column 3, line 33

Insert --p + s + v < 1;-- and delete “P + s + v < 1;”

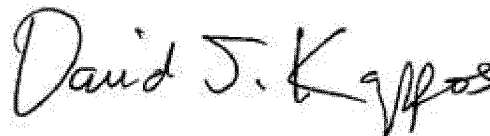
Column 3, line 35

Insert --3 + s - p = x - y + 2 + t + 2q + 3r-- and delete “3 + s - p = x - y + t + 2q + 3r”.

Column 3, line 39

Before “and s may vary”, insert --p-- and delete “r”.

Signed and Sealed this  
Twenty-second Day of May, 2012



David J. Kappos  
Director of the United States Patent and Trademark Office

**CERTIFICATE OF CORRECTION (continued)**

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Column 4, line 1

Before “The phrase”, insert --described.-- and delete “describe.”

Column 4, line 7

Before “a vanadium oxide”, insert --dichalcogenide,-- and delete “dichalcogenide,”.

Column 4, line 43

Before “a salt, the cation”, insert --contains-- and delete “contain”.

Column 4, line 47

Before “or a dialkylether”, insert --tetraalkylsulfamide-- and delete “tetraalkylsulfamiide”.

Column 4, line 58

Before “on a transparent”, insert --layered-- and delete “layed”.

Column 4, line 62

Before “nanometers”, insert -- $10^3$ -- and delete “ $10^4$ ”.

Column 5, line 9

After “polyethylene”, insert --terephthalate-- and delete “terephatalate”.

Column 6, line 17

After “gives the undesired”, insert --monoclinic-- and delete “monoclinc”.

Column 6, line 20

Before “and  $\text{NH}_4\text{H}_2\text{PO}_4 \cdot \text{H}_2\text{O}$ ”, insert -- $\text{Na}_2\text{CO}_3$ ,  $\text{Fe}\{\text{CH}_3\text{COO}\}_2$ -- and delete “ $\text{NaCO}_3$ ,  $\text{Fe}\{\text{CH}_2\text{COOH}\}_2$ ”.

Column 6, line 54

After “formula”, insert -- $\text{A}_{3-x}\text{V}_2(\text{PO}_4)_3$ -- and delete “ $\text{A}_3\text{-V}_2(\text{PO}_4)_3$ ”.

Column 7, line 24

After “ $0.05 \text{ mA} \cdot \text{cm}^{-2}$ ”, insert -- $(2.1 \text{ mA} \cdot \text{g}^{-1})$ -- and delete “ $(0.95 \text{ mA} \cdot \text{g}^{-1})$ ”.

Column 9, line 22

Before “anode”, insert --metallic-reductant-- and delete “metallic-reductant”.

Column 11, line 21

After “cells of the”, insert --invention.-- and delete “insertion.”.

Column 12, line 5

Before “or the more open”, insert -- $\text{LiM}(\text{PO}_4)$ ,-- and delete “ $\text{LiN}(\text{PO}_4)$ ,”.

Column 12, line 7

Before “for the ordered”, insert -- $\text{LiM}(\text{PO}_4)$ -- and delete “ $\text{LiN}(\text{PO}_4)$ ”.

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Column 12, line 36

After “site occupancy”, insert --and electroneutrality-- and delete “an delectroneutrality”.

Column 12, line 44

Insert -- $3 + s - p = x - y + 2 + t + 2q + 3r$ -- and delete “ $3 + s - p = x - y + t + 2q + 3r$ ”.

Column 12, line 47

Before “and v may vary”, insert --r--.

Column 12, line 48

Before “and s may vary”, insert --p-- and delete “r”.

Column 13, line 4

After “0.05 mAxc<sub>m</sub>-2”, insert --(2.1 mA•g<sup>-1</sup>, 1.13 mA•g<sup>-1</sup>, and 0.95 mA•g<sup>-1</sup>, respectively,-- and delete “(0.95 mA<sub>x</sub> g<sup>-1</sup> and 1.13 mA<sub>x</sub> g<sup>-1</sup>, respectively,”.

Column 13, line 6

Before “respectively, where”, insert --Li<sub>x</sub>FePO<sub>4</sub>-- and delete “LiFePO<sub>4</sub>,”.

Column 13, line 6

After “respectively, where”, insert -- $0 \leq x \leq 0.5$ -- and delete “ $0 \leq x \leq 5$ ”.

Column 13, line 60

After “as seen in FIGS.”, insert --2A-2C)-- and delete “2A-2C??”.

Column 14, line 4

After “the pristine olivine structure of”, insert --LiM(PO<sub>4</sub>)-- and delete “LiN(PO<sub>4</sub>)”.

Column 14, line 8

Before “and electronic conductivity”, insert --diffusivity-- and delete “diffusitivity”.

Column 14, line 52

After “to exhibit”, insert --phase transition-- and delete “phasetransition”.

Column 16, line 6

Before “C. under argon”, insert --then 700°-- and delete “the 70020”.

Column 16, line 8

Insert --Li<sub>1.1</sub>Fe<sub>0.8</sub>Ti<sub>0.1</sub>P<sub>0.8</sub>Si<sub>0.2</sub>O<sub>4</sub>-- and delete “Li<sub>1.1</sub>Fe<sub>0.8</sub>TiP<sub>0.8</sub>Si<sub>0.2</sub>O<sub>4</sub>”.

Column 16, line 10

After “in acetonitrile to”, insert “Li<sub>0.1</sub>Fe<sub>0.8</sub>Ti<sub>0.1</sub>P<sub>0.8</sub>Si<sub>0.2</sub>O<sub>4</sub>” and delete “Li<sub>0.1</sub>Fe<sub>0.8</sub>TiP<sub>0.8</sub>Si<sub>0.2</sub>O<sub>4</sub>”.

Column 17, line 4

After “other for”, insert -- $1 < x < 2$ -- and delete “ $1 < X < 2$ ”.

**CERTIFICATE OF CORRECTION (continued)**

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Column 17, line 21

Before “gives a V vs. x curve”, insert -- $\text{Li}_{1+x}\text{FeNb}(\text{PO}_4)_3$ -- and delete “ $\text{Li}_{1+x}\text{Fenb}(\text{PO}_4)_3$ ”.

Column 17, line 27

Before “at 1.7 V”, insert -- $\text{Nb}^{4+}/\text{Nb}^{3+}$ -- and delete “ $\text{Nb}^{4+}/\text{Nb}^{5+}$ ”.

Column 17, line 31

Before “sodium analog”, insert --monoclinic-- and delete “monoclihnic”.

Column 17, line 35

After “for the”, insert --rhombohedral-- and delete “rhombhedral”.

Column 17, line 35

Before “(0.95”, insert -- $\text{mA}\cdot\text{cm}^{-2}$ -- and delete “ $\text{mA}\cdot\text{cmM}^{-2}$ ”.